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Claims

[c1] 1. A method of forming a phase shift mask, said method comprising:

forming an opaque layer on a transparent substrate;

performing a first patterning of said opaque layer to expose a first region of said transparent substrate;

etching said first region of said transparent substrate to create a phase shift region within said transparent substrate; and

performing additional patterning of said opaque layer to expose a second region of said transparent substrate, wherein said second region is adjacent said first region.

[c2] 2. The method in claim 1, wherein said additional patterning process enlarges the opening formed in said first patterning process.

[c3] 3. The method in claim 1, wherein said first region and said second region comprise a continuous area of said transparent substrate.

[c4] 4. The method in claim 1, wherein said opaque layer comprises a chrome mask.

[c5] 5. The method in claim 1, wherein said transparent substrate comprises a quartz substrate.

[c6] 6. The method in claim 1, wherein said first region comprises a rectangle.

[c7] 7. The method in claim 6, wherein said second region comprises a similarly shaped and sized rectangle as said first region.

[c8] 8. A method of forming a phase shift mask, said method comprising:

forming an opaque layer on a transparent substrate;

performing a first patterning of said opaque layer to expose first regions of said transparent substrate;

etching said first regions of said transparent substrate to create phase shift regions within said transparent substrate; and

performing additional patterning of said opaque layer to expose second regions and third regions of said transparent substrate, wherein said second regions are adjacent said first regions and said third regions are separated from said first regions, such that said third regions are devoid of phase shift features.

[c9] 9. The method in claim 8, wherein said additional pat-

terning process enlarges the openings formed in said first patterning process.

[c10] 10. The method in claim 8, wherein each pair of said first regions and said second regions comprises a continuous area of said transparent substrate.

[c11] 11. The method in claim 8, wherein said opaque layer comprises a chrome mask.

[c12] 12. The method in claim 8, wherein said transparent substrate comprises a quartz substrate.

[c13] 13. The method in claim 8, wherein said first regions comprises rectangles.

[c14] 14. The method in claim 13, wherein said second regions comprises similarly shaped and sized rectangles as said first regions.

[c15] 15. A method of forming a phase shift mask, said method comprising:

forming an opaque chrome layer on a transparent quartz substrate;

performing a first patterning of said opaque chrome layer to expose a first region of said transparent quartz substrate;

etching said first region of said transparent quartz

substrate to create a phase shift region within said transparent quartz substrate; and
performing additional patterning of said opaque chrome layer to expose a second region of said transparent quartz substrate, wherein said second region is adjacent said first region.

[c16] 16. The method in claim 15, wherein said additional patterning process enlarges the opening formed in said first patterning process.

[c17] 17. The method in claim 15, wherein said first region and said second region comprise a continuous area of said transparent quartz substrate.

[c18] 18. The method in claim 15, wherein said opaque chrome layer comprises a chrome mask.

[c19] 19. The method in claim 15, wherein said first region comprises a rectangle.

[c20] 20. The method in claim 19, wherein said second region comprises a similarly shaped and sized rectangle as said first region.